



# MSA Chemgard® Application

[ for manufacturer of large, flat television screens ]

**APPLICATION:** During the production process, TV screens pass through two long blackening furnaces on conveyor belts. Natural gas is burned and the hot combustion products are used to obtain the desired atmosphere in the furnaces. Carbon monoxide (CO) and carbon dioxide (CO<sub>2</sub>) measurements are critical to controlling the process and controlling product quality. Not only are the CO and CO<sub>2</sub> levels of importance, but so are the ratios. Previously, the customer would periodically analyze each of four zones per furnace with a large portable analyzer.

**SOLUTION:** The customer purchased two 8-point Chemgard Monitors: one for 0-10% CO; the other for 0-100% CO<sub>2</sub> calibrated up to 20% (readings over 20% will never occur). Now, the customer is “continuously” monitoring all eight zones for both gases. The customer likes the feature that allows them to go into INFO, DATA and quickly write down the last readings on all eight points. Gathering such data previously took an hour and now takes 3 minutes. The customer plans to use the 4-20mA and 0-10V outputs to fully convert to automatic control.

**Carbon Monoxide**

**Formula: CO**

**TLV: 25 ppm**

**Chemgard Detection Limit: 4 ppm**

**Carbon Dioxide**

**Formula: CO<sub>2</sub>**

**TLV: 5000 ppm**

**Chemgard Detection Limit: 0.04 ppm**

**Note:** This Data Sheet contains only a general description of the product shown. While uses and performance capabilities are described, under no circumstances should the product be used except by qualified, trained personnel, and not until the instructions, labels or other literature accompanying the product have been carefully read and understood and the precautions therein set forth followed. Only they contain the complete and detailed information concerning this product.

Instrument Division:  
P.O. Box 427, Pittsburgh  
PA 15230 U.S.A.  
[www.msagasdetection.com](http://www.msagasdetection.com)

In U.S.:  
Phone: 1-800-MSA-INST  
Fax: 1-724-776-3280

In Canada:  
Phone: 1-800-MSA-INST  
Fax: 1-905-238-4151

In Mexico:  
Phone: 52-55-2122-5770  
Fax: 52 (5) 3 59 43 30

MSA International:  
Phone: 412-967-3228  
Fax: 412-967-3373

Offices and representatives  
worldwide  
For further information:

